AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (Currently Amended) A burn resistant and high tensile strength alloy, comprising:

about 55 to about 75 weight percent nickel;

about 12 to about 17 weight percent cobalt;

~~at most about 12~~ less than 10 weight percent chromium;

about 1 to about 4 weight percent aluminum; and

about 1 to about 4 weight percent titanium;

wherein said alloy includes a extinguishing threshold pressure greater than about 4000 psia.

2. (Original) The alloy of claim 1, wherein the nickel content is about 70 to about 75 weight percent.

3. (Original) The alloy of claim 1, wherein the cobalt content is about 13.5 to about 16.5 weight percent.

4. (Currently Amended) The alloy of claim 1, wherein the chromium content is about 1 to about ~~11.5~~ 9 weight percent.

5. (Currently Amended) The alloy of claim 1, wherein the aluminum content is about 1 to about ~~3~~ 2 weight percent.

6. (Original) The alloy of claim 1, further comprising about 0.15 to about 0.25 weight percent manganese.

7. (Previously Presented) The alloy of claim 1, further comprising silicon.

8. (Original) The alloy of claim 1, further comprising about 0.01 to about 0.5 weight percent carbon.

9. (Original) The alloy of claim 1, further comprising about 0.003 to about 0.009 weight percent boron.

10. (Original) The alloy of claim 1, further comprising about 0.02 to about 0.07 weight percent zirconium.

11. (Cancelled)

12. (Cancelled)

13. (Cancelled)

14. (Cancelled)

15. (Cancelled)

16. (Cancelled)

17. (Cancelled)

18. (Currently Amended) A nickel-based metal alloy comprising:

at least 50 weight percent nickel;

less than about ~~12~~ 9 weight percent chromium;

a threshold pressure at least about 4,000 pounds per square inch; and

a tensile strength at least about 160,000 pounds per square inch.

19. (Currently Amended) The nickel-based metal alloy of claim 18, further comprising cobalt, ~~chromium~~ aluminum, and titanium.

20. (Previously Presented) The nickel-based metal alloy of claim 19, further comprising: manganese, carbon, boron, zirconium, or silicon.

21. (Original) The nickel-based metal alloy of claim 18, wherein said threshold pressure is between about 4,000 and about 12,000 pounds per square inch.

22. (Original) The nickel-based metal alloy of claim 18, wherein said tensile strength is between about 160,000 and about 180,000 pounds per square inch.

23. (Withdrawn) A component for a rocket engine subject to high stress environments including a nickel alloy, comprising:

at least about 60 weight percent nickel;

about 1 to 4 weight percent aluminum;

about 1 to 4 weight percent titanium;

a threshold pressure of at least about 4,000 pounds per square inch; and

a tensile strength of at least about 160,000 pounds per square inch;

wherein said threshold pressure and said tensile strength produce a rocket engine able to withstand a plurality of uses.

24. (Withdrawn) The component of the rocket engine of claim 23, further comprising cobalt, chromium, zirconium, boron, or combinations thereof.

25. (Withdrawn) The component for the rocket engine of claim 23, further comprising:

about 60 to about 75 weight percent nickel;

about 12 to about 17 weight percent cobalt;

about 4 to about 16 weight percent chromium;

about 1 to about 4 weight percent aluminum; and

about 1 to about 4 weight percent titanium.

26. (Not Entered) A metal alloy, consisting essentially of:

at least 72 weight percent nickel;

less than 10 weight percent chromium;

about 12 to about 17 weight percent cobalt; and

less than about 10 weight percent of gamma prime formers.

C1

27. (Not Entered) The metal alloy of claim 26, wherein said gamma prime formers consist of aluminum and titanium.

28. (Not Entered) The metal alloy of claim 27, consisting essentially of manganese.

21